

# MILAN KACAR

## Software & Survey Engineer

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## ABOUT ME

I am a Software Engineer & Survey Engineer with 1.5 year of professional experience. I graduated Geodesy at Graz University of Technology in Austria, where I work as a project and teaching assistant. I am currently enrolled in two Master's degree programs : Geodesy & Computer Science at the same university. I grew up in Mrkonjic Grad (Republic of Srpska, BA) where I finished my highschool having Mathematics, Logic and Physics at higher level.

## PERSONAL INFORMATION

👤 Date of birth	01.09.1995
📍 Birthplace	Banja Luka, BA
🚩 Citizenship	Austrian
❤ Marital status	Single
♂ Sex	Male

## EDUCATION

### GYMNASIUM

📅 2010 - 2014    📍 Mrkonjic Grad, BA

### BSc Geomatics Engineering

University of Technology, TU Graz

📅 2015 - 2019    📍 Graz, Austria

### Master's Degree Programme - Geodesy

University of Technology, TU Graz

📅 2019-Present    📍 Graz, Austria

### Master's Degree Programme - Computer Science

University of Technology, TU Graz

📅 2020-Present    📍 Graz, Austria

## UNIVERSITY & PERSONAL PROJECTS

- STOCK PRICES PREDICTOR - Project uses AI (Artificial intelligence) and ML (Machine learning) as a hybrid approach to detect prices fluctuation for stocks considering different indexes (SP 500, Dow Jones, DAX etc.)
- LOTTO NUMBERS PREDICTOR - It was a try to predict lotto numbers for the next draw.
- SCIENTIFIC PAPER MINER - This project is GOOGLE for scientific papers.
- POLLEN TREE DETECTOR (FROM SATELLITE IMAGES) - This project presents an automated tree detecting and identification method based on image processing of satellite imagery.
- DIFFERENT SIGNAL PROCESSING PROJECTS - Mostly projects on GNSS signals.
- GRAVITY ANOMALY MAPS - GRACE misson.
- KALMAN FILTER · ADEVANCED KALMAN FILTER · PARTICLE FILTER - as a part of indoor navigation.
- DIFFERENT ARDUINO PROJECTS - Mostly projects from youtube tutorials and combination of different projects.

## LOOKING FOR

” To work in a progressive and dynamic organization where one could solve scientific enigmas and contribute towards welfare of society ”

## TECHNICAL STRENGTH

Python	● ● ● ● ●
C/C++	● ● ● ● ●
GIS	● ● ● ● ●
PostgreSQL	● ● ● ● ●
Navigation	● ● ● ● ●
MATLAB	● ● ● ● ●
GNSS	● ● ● ● ●
Signal Processing	● ● ● ● ●
Java	● ● ● ● ●
Data Structures & Algorithms	● ● ● ● ●
MySQL	● ● ● ● ●
Docker	● ● ● ● ●
Kubernetes	● ● ● ● ●
PHP	● ● ● ● ●
Linux	● ● ● ● ●
R	● ● ● ● ●
Apache Spark	● ● ● ● ●
Skala	● ● ● ● ●
Java Script	● ● ● ● ●

# DISSERTATION WORK

## BSc Thesis

### Database for cycling routes

- Entity Relationship Diagram.
- Building the Database.
- Conversion from analog to digital maps.

## MSc Thesis

### PV (Photovoltaic) panels detection from satellite images

- Project uses AI (Artificial intelligence) and ML (Machine learning) as a hybrid approach to detect panels.
- Building an independent model to work on different datasets.
- CapsNets for object detection.
- YOLOv5

# WORK EXPERIENCE

## Teaching Assistant

### TU Graz

📅 March 2021 - Present      📍 Graz, Austria

- Integrated navigation
- Sensor fusion
- Indoor navigation

## Software Engineer

### TU Graz

📅 Sep 2019 - Present      📍 Graz, Austria

- Automation
- Statistics
- Geoinformatics
- Automotive industry

## Survey Engineer

### GEODATA

📅 July 2019 - December 2020      📍 Semmering Basistunnel, Austria

- Tunnel surveying
- 3D Laser scanner measurements

# HOBBIES



### Reading

I am trying to read a book per week.



### Sports Addict

At a young age I enjoyed playing tennis, but my interests migrated towards Fitness and healthy food.



### Travelling

After living in a rustic, small town for the past 18 years, I was craving change and adventure. Six years later, I've traveled to more places during college than the first two decades of my life.

# STRENGTHS

Hard-working

Decision Making

Ability to Work Under Pressure

Motivator & Leader

Conflict Resolution

Time Management

Target oriented

Able to travel

Flexibility and Adaptability

Problem solver

# LANGUAGES

Serbian | Croatian | Bosnian  
German  
English  
Russian

